

* * * * LE'VZ 200/300 ODP * * * *

DECEMBER 1986. #14 A\$1.00. J.C.E.D'ALTON. 39 Agnes St. TOOWONG. QLD. 4066.

AUSTRALIA.

Hi ODPs,

How many ODPs picked up the mistake in LE'VZ #13 where I was refering to my use of the Wodonga 2 metre Amateur repeater transmitting on 147000 MHZ. Boy what UHF., it should have been 147 MHZ.

It appears there are many ODPs who have not been 'stirred up' yet in regards to LE'VZ # 12. Perhaps YOU may like to write to me before our postage rates increase from 36c, again. I have developed a Demonstration/ Advertisement Disc (DAD), which will be sent to various Dick Smith Stores, so please check with your DSE. store and see if it is being used.

I have given a brief report on the use of the VZ Modem Terminal Interface in this issue. There have been a few folk asking about it.

I have received an envelope with no letter or return address on it, so if you have not had a reply from me, it may have been yours. NO I can't read the postmark either.

By now you may have noticed the new print style, as I have invested in a new printer. A Citizen 120D. It has many print styles plus a new style of Double Height print. It will make LE'VZ look much better. Of course the print style has to be set before loading the DSE. Word Processor, but as I print LE'VZ in sections this will be no great problem. It is about time someone has had time to modify the W.P. programme to allow different print styles, but maybe soon.

I remind folk who send me contributions to please make sure the print is nice and dark by fitting a new ribbon or handwriting with a RED pen.

Now some very good news for many folk!!! I have negotiated with the Authors of AIRTRAFFIC CONTROLLER, LEARJET and some other software that was previously bought through DSE., to distribute/sell them via VSOFTWAREZ. Thanks to Brian Hanlon. See Software section.

I am also talking with the International Correspondence Schools management in regards to



LE'VZ 200/300 ODP because their computer programming course includes a VZ in the package. So if you know of anyone who is doing the course would you please let them know about LE'VZ. and the Extended Basic unit.

With 1986 drawing to a close I would like to hold a little gathering again early December. Either at our place again, or if anyone else would like to offer their home which may have a larger room than where we held it last year, would be much appreciated. We had about 18 folk turn up last year. PLEASE contact me for further information as soon as you receive this LE'VZ.

There are a few ODPs who have received a list of ODPs in their area, so perhaps you can organise a gathering also. I can assure you that it is very rewarding.

Well that's all for this time. Marie and I wish you and your family have a very joyous Christmas season and may God be with you then and all through the New Year.

John.

LE'VZ #14 P1.



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10 REM INSTRUCTIONS
20 REM BY SCOTT LE BRUN
30 REM NOV 1985
35 CLS:FOR I=1 TO 5:PRINT@134,"PLEASE STOP HERE";SOUND25,5:CLS
37 SOUND10,5:NEXT
40 COLOR3,0
45 GOSUB50:GOTO80
50 PRINT@0,"";
60 FOR I=32 TO 448 STEP 32:PRINT@1,"";
65 NEXT
70 PRINT@480,"";POKE22183,175
75 RETURN
80 PRINT@69,"P R O   F O O T B A L L"
90 PRINT@169,"WOULD YOU LIKE"
92 PRINT@193,"INSTRUCTIONS (Y/N)"
100 PRES$=INKEY$:RESP$=INKEY$:IF RESP$="Y",100
110 IF RESP$="N",210
120 GOSUB50:PRINT@65,"WELCOME TO THE VSOFTWAREZ BOWL"
130 PRINT@97,"-----"
132 PRINT@161,"YOU ARE ABOUT TO MATCH WITS"
134 PRINT@193,"AGAINST THE VZ300 COMPUTER"
135 PRINT@161,"YOU ARE ABOUT TO MATCH WITS"
136 PRINT@225,"IN A GAME OF RUGBY, YOU WILL BE"
138 PRINT@257,"PLAYING N F L STANDARD RULES"
140 PRINT@289,"FOR THE MOST PART, ONE OF THE"
142 PRINT@321,"MAJOR CHANCES IN THE RULES WE"
144 PRINT@353,"WILL PLAY BY IS THAT A QUARTER"
146 PRINT@385,"IS COMPOSED OF 30 PLAYS AS"
148 PRINT@450,"PRESS=INKEY$:IF PRES$<>CHR$(13),150 ELSE RETURN
150 RESP$=INKEY$:PRES$=INKEY$:IF PRES$<>CHR$(13),150 ELSE RETURN
152 GOSUB50:PRINT@65,"OPPOSED TO 15 MINUTES, THE TWO"
154 PRINT@97,"MINUTE WARNING WILL BE GIVEN"
156 PRINT@129,"AFTER 24 PLAYS."
158 PRINT@161,"AT THE BEGINNING OF THE GAME,"
160 PRINT@193,"YOU WILL HAVE THE OPTION OF"
162 PRINT@225,"KICKING OR RECEIVING. IF YOU"
164 PRINT@257,"OPT TO RECEIVE, YOU WILL BE"
166 PRINT@289,"GIVEN THE BALL ON THE 20 YARD"
168 PRINT@321,"LINE. DURING THE 1ST AND 3RD"
170 PRINT@353,"QUARTERS, YOU WILL BE MOVING"
172 PRINT@385,"FROM LEFT TO RIGHT AND IN THE"
174 GOSUB50
176 PRINT@65,"2ND AND 4TH QUARTERS, JUST THE"
178 PRINT@97,"OPPOSITE, YOU MAY CHOOSE 1 OF 7"
180 PRINT@129,"DIFFERENT OFFENSIVE PLAYS. YOU"
182 PRINT@161,"MAY PUNT OR TRY TO KICK A"
184 PRINT@193,"FIELD GOAL ON ANY DOWN, BUT"
186 PRINT@225,"TAKE SOME ADVICE AND DO NOT"
188 PRINT@257,"TRY FROM MORE THAN 45 YARDS"
190 PRINT@289,"OUT. IF YOU FAIL TO GET A FIRST"
192 PRINT@321,"DOWN, I WILL TAKE POSSESSION OF"
194 PRINT@353,"THE BALL. YOU MAY SELECT ANY 1"
196 PRINT@385,"OF 5 DEFENSIVES TO TRY AND"
198 PRINT@417,"KEEP ME FROM SCORING."
200 GOTO49
210 CLS:FOR I=1 TO 5:PRINT@134,"PLEASE STOP HERE";SOUND25,5
215 CLS:SOUND10,5:NEXT:CRUI

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20 REM BY SCOTT LE BRUN
30 REM NOV 1985
40 POKE30862,99:POKE30863,52
50 OUT$="!!! FIELD GOAL WAS GOOD !!!"
60 IN$="!!! FIELD GOAL TRY WIDE !!!"
340 CLS:XX=1:YY=1
350 CS="B"
360 VSR=0:HSR=0:DN=1:YDS=10:QTR=1:PLS=0:MS="2":YS="B"
365 GOSUB370:GOSUB395:GOTO599
370 COLOR3,0
375 CLS:PRINT@0,"";
380 FOR I=32 TO 448 STEP 32:PRINT@1,"";
395 NEXT:PRINT@480,"";
395 POKE229183,175:RETURN
395 FOR I=45 TO 173 STEP 32:PRINT@1,"";NEXT
400 PRINT@173,"";COLOR2
405 PRINT@225,"";
410 FOR I=257 TO 417 STEP 32:PRINT@1,"";
415 NEXT:PRINT@449,"";
430 PRINT@46,"HOME QTR VISITORS"
440 PRINT@79,HSR:PRINT@83,QTR:PRINT@89,VSR
450 PRINT@110,"DOWN":PRINT@115,"YARDS TO GO"
460 PRINT@142,DN:PRINT@151,YDS
470 PRINT@257,"% 10 20 30 40 50 60 70 80 90 100"
480 COLOR1:FOR I=290 TO 418 STEP 32:PRINT@1,"";
490 NEXT:PRINT@487,"PRESS=INKEY$:IF PRES$<>CHR$(13),
500 COLOR3,0:RETURN
590 FOR I=1 TO 10:FOR J=1 TO 5:READY$=I,J:NEXT J,1
600 PRINT@233,"WOULD YOU":PRINT@255,"LIKE TO KICK"
610 PRINT@297,"OR RECEIVE?":PRINT@129,"(K/R)"
615 IF INKEY$<>"",615
620 PRES=INKEY$:IF PRES$="K",660
630 IF PRES$="R",660
640 IF PRES$="K",660
650 GOTO620
660 HOLD$=PRES:IF PRES$="R",POS$="H" ELSE POS$="C"
670 FOR A=31 TO 55 STEP 1:SOUNDAR,1:NEXT
680 IF PRES$="K",OFS=55:NPS=55:GOTO720
690 IF PRES$="R",OFS=25:NPS=25:GOTO1130
700 GOTO620
710 END
720 GOSUB64000:PRINT@33,"IT'S MY":PRINT@65,"BALL ON THE"
730 GOSUB62790:PRINT@97,YN:PRINT@101,"YRD LINE":POS$="C"
730 DN=1:YDS=10
790 IF QTR=1 OR QTR=3,PRINT@347+NPS/2,M$
800 IF QTR=2 OR QTR=4,PRINT@347+NPS/2,Y$
810 PRINT@142,DN:PRINT@151,YDS
820 GOSUB62790:PRINT@97,YN
830 IF INKEY$<>"",830
840 PRES=INKEY$:IF PRES$="K",840
845 IF PRES$="H",GOSUB1810
850 IF PRES$<>"O" OR PRES$<>"5",840
860 GOSUB65000
870 POSI=VAL(P$)
880 GOSUB 1750
890 COLOR1,0
900 GOSUB480
910 COLOR3,0
920 PLS=PLS+1
930 IF PLS=25,GOSUB3450
940 IF PLS>30 AND QTR=4,GOTO2920
950 IF PLS>30 AND QTR=2,GOSUB62790:GOTO670

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NOW GOTO 746E 3.


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960 IFPLS>30,GOSUB2300:GOTO720
970 IFDN>3ANDNPS<35ANDQTR=1ORQTR=3),GOSUB2620:GOTO1190
980 IFDN>3ANDNPS>45ANDQTR=2ORQTR=4),GOSUB2620:GOTO1190
990 IFDN>3,GOSUB2370:GOTO1190
1000 E=0:IFYRDX(RM,POS1)=0ORYRDX(RM,POS1)=98ORYRDX(RM,POS1)<10,E=1
1005 IFE=1,DELAY=20ELSEDELAY=40
1010 FOFHOLD=1TODELAY:PRINT200,"PLAY IN PROGRESS":X=USR(X)
1015 PRINT200,"":NEXT
1020 IFYRDX(RM,POS1)=99,GOSUB1970:GOTO1190
1030 IFYRDX(RM,POS1)=98,GOSUB2170:GOTO1190
1040 IFYRDX(RM,POS1)=100,GOSUB2250:GOTO1190
1050 YDS=YDS-YRDX(RM,POS1)
1060 IFYDS<0,DN=1:YDS=1ELSEDN=DN+1
1070 R=0:IFQTR=1ORQTR=3),NPS=OPS-(YRDX(RM,POS1)/2):R=1
1075 IFR=0,NPS=OPS-(YRDX(RM,POS1)/2)
1080 IFNPS<15ANDQTR=1ORQTR=3),GOSUB2250:GOTO1190
1090 IFNPS<15ANDQTR=2ORQTR=4),GOSUB2200:GOTO1190
1100 IFNPS>54ANDQTR=2ORQTR=4),GOSUB2250:GOTO1190
1110 IFNPS>54ANDQTR=1ORQTR=3),GOSUB2200:GOTO1190
1120 OPS=NPS
1130 IFQTR=1ORQTR=3,C$=M$
1140 IFQTR=2ORQTR=4,C$=Y$
1150 IFYRDX(RM,POS1)=0,GOSUB2810
1160 IFYRDX(RM,POS1)>0,GOSUB2830
1170 IFYRDX(RM,POS1)<0,GOSUB2850
1180 GOTO720
1190 GOSUB4000:GOSUB2780:PRINT233,"IT'S YOUR"
1192 PRINT265,"BALL ON THE":PRINT297,YLN:PRINT2101,"YRD LINE"
1200 DN=1:YDS="H"
1260 IFQTR=1ORQTR=3,PRINT2347+NPS/2,Y$
1270 IFQTR=2ORQTR=4,PRINT2347+NPS/2,M$
1280 PRINT142,DN:PRINT2151,YDS
1290 GOSUB2780:PRINT297,YLN
1300 IFINKEY<"",1300
1310 P$=INKEY$:IFP$="",1310
1315 IFP$="M",GOSUB1660
1320 IFP$="O"ORP$="7",1310
1330 GOSUB6500
1340 POS1=VAL(P$)
1350 GOSUB1750
1360 COLOR1,0
1370 GOSUB480
1380 COLOR3
1390 PLS=PLS+1
1400 IFPLS=25ANDQTR=2ORQTR=4),GOSUB3450
1410 IFPLS>30ANDQTR=4),GOTO2320
1420 IFPLS>30ANDQTR=2),GOSUB2370:GOTO670
1430 IFPLS>30,GOSUB2300:GOTO1260
1440 IFPOS1=7,GOSUB2300:GOTO720
1450 IFPOS1=5,GOSUB2440:GOTO720
1460 R=0:IFYRDX(RM,POS1)=0ORYRDX(RM,POS1)=98ORYRDX(RM,POS1)<10,P=1
1465 IFR=1,DELAY=20ELSEDELAY=40
1470 FOFHOLD=1TODELAY:PRINT200,"PLAY IN PROGRESS":X=USR(X)
1475 PRINT200,"":NEXT
1480 IFYRDX(RM,POS1)=99,GOSUB1900:GOTO720
1490 IFYRDX(RM,POS1)=98,GOSUB2040:GOTO720
1500 IFYRDX(RM,POS1)=100,GOSUB2120:GOTO720
1510 YDS=YDS-YRDX(RM,POS1)
1520 IFYDS<0,DN=1:YDS=1ELSEDN=DN+1
1530 T=0:IFQTR=1ORQTR=3),NPS=OPS-(YRDX(RM,POS1)/2):T=1
1535 IFT=0,NPS=OPS-(YRDX(RM,POS1)/2)
1540 IFQTR=1ORQTR=3,ANDNPS>64,GOSUB2120:GOTO720
1550 IFQTR=2ORQTR=4,ANDNPS>64,GOSUB2070:GOTO720
1560 IFQTR=2ORQTR=4,ANDNPS<15,GOSUB2120:GOTO720
1570 IFQTR=1ORQTR=3,ANDNPS<16,GOSUB2070:GOTO720

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LE'V2 #14 . P3.

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1580 Y=0:IFDN>4ANDQTR=1ORQTR=3),PRINT2194,"BALL TURNED":Y=1
1585 IFY=1,PRINT" OVER ON 4TH DOWN":SOUND30,1:DN=1:YDS=10:C$=M$
1587 IFY=1,720
1590 Y=0:IFDN>4ANDQTR=2ORQTR=4),PRINT2194,"BALL TURNED":Y=1
1595 IFY=1,PRINT" OVER ON 4TH DOWN":SOUND30,1:DN=1:YDS=10:C$=M$
1597 IFY=1,720
1600 OPS=NPS
1610 IFQTR=1ORQTR=3,C$=Y$ELSEC$=M$
1620 IFYRDX(RM,POS1)=0,GOSUB2810
1630 IFYRDX(RM,POS1)>0,GOSUB2830
1640 IFYRDX(RM,POS1)<0,GOSUB2850
1650 GOTO1260
1660 GOSUB370:PRINT233,"OFFENSIVE PLAY":PRINT265,"SELECTION 1-7"
1665 PRINT297,"":NEXT
1670 PRINT2161,"1 = LINE PLUNGE"
1680 PRINT2193,"2 = END RUN"
1690 PRINT2225,"3 = SCREEN PASS"
1700 PRINT2257,"4 = SHORT PASS"
1710 PRINT2289,"5 = LONG BOMB"
1720 PRINT2321,"6 = FIELD GOAL"
1730 PRINT2353,"7 = PUNT"
1740 PRINT2486,"12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199200201202203204205206207208209210211212213214215216217218219220221222223224225226227228229230231232233234235236237238239240241242243244245246247248249250251252253254255256257258259260261262263264265266267268269270271272273274275276277278279280281282283284285286287288289290291292293294295296297298299300301302303304305306307308309310311312313314315316317318319320321322323324325326327328329330331332333334335336337338339340341342343344345346347348349350351352353354355356357358359360361362363364365366367368369370371372373374375376377378379380381382383384385386387388389390391392393394395396397398399400401402403404405406407408409410411412413414415416417418419420421422423424425426427428429430431432433434435436437438439440441442443444445446447448449450451452453454455456457458459460461462463464465466467468469470471472473474475476477478479480481482483484485486487488489490491492493494495496497498499500501502503504505506507508509510511512513514515516517518519520521522523524525526527528529530531532533534535536537538539540541542543544545546547548549550551552553554555556557558559560561562563564565566567568569570571572573574575576577578579580581582583584585586587588589590591592593594595596597598599600601602603604605606607608609610611612613614615616617618619620621622623624625626627628629630631632633634635636637638639640641642643644645646647648649650651652653654655656657658659660661662663664665666667668669670671672673674675676677678679680681682683684685686687688689690691692693694695696697698699700701702703704705706707708709710711712713714715716717718719720721722723724725726727728729730731732733734735736737738739740741742743744745746747748749750751752753754755756757758759760761762763764765766767768769770771772773774775776777778779780781782783784785786787788789790791792793794795796797798799800801802803804805806807808809810811812813814815816817818819820821822823824825826827828829830831832833834835836837838839840841842843844845846847848849850851852853854855856857858859860861862863864865866867868869870871872873874875876877878879880881882883884885886887888889890891892893894895896897898899900901902903904905906907908909910911912913914915916917918919920921922923924925926927928929930931932933934935936937938939940941942943944945946947948949950951952953954955956957958959960961962963964965966967968969970971972973974975976977978979980981982983984985986987988989990991992993994995996997998999100010011002100310041005100610071008100910101011101210131014101510161017101810191020102110221023102410251026102710281029103010311032103310341035103610371038103910401041104210431044104510461047104810491050105110521053105410551056105710581059106010611062106310641065106610671068106910701071107210731074107510761077107810791080108110821083108410851086108710881089109010911092109310941095109610971098109911001101110211031104110511061107110811091110111111121113111411151116111711181119112011211122112311241125112611271128112911301131113211331134113511361137113811391140114111421143114411451146114711481149115011511152115311541155115611571158115911601161116211631164116511661167116811691170117111721173117411751176117711781179118011811182118311841185118611871188118911901191119211931194119511961197119811992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013023033043053063073083093103113123133143153163173183193203213223233243253263273283293303313323333343353363373383393403413423433443453463473483493503513523533543553563573583593603613623633643653663673683693703713723733743753763773783793803813823833843853863873883893903913923933943953963973983994004014024034044054064074084094104114124134144154164174184194204214224234244254264274284294304314324334344354364374384394404414424434444454464474484494504514524534544554564574584594604614624634644654664674684694704714724734744754764774784794804814824834844854864874884894904914924934944954964974984995005015025035045055065075085095105115125135145155165175185195205215225235245255265275285295305315325335345355365375385395405415425435445455465475485495505515525535545555565575585595605615625635645655665675685695705715725735745755765775785795805815825835845855865875885895905915925935945955965975985996006016026036046056066076086096106116126136146156166176186196206216226236246256266276286296306316326336346356366376386396406416426436446456466476486496506516526536546556566576586596606616626636646656666676686696706716726736746756766776786796806816826836846856866876886896906916926936946956966976986997007017027037047057067077087097107117127137147157167177187197207217227237247257267277287297307317327337347357367377387397407417427437447457467477487497507517527537547557567577587597607617627637647657667677687697707717727737747757767777787797807817827837847857867877887897907917927937947957967977987998008018028038048058068078088098108118128138148158168178188198208218228238248258268278288298308318328338348358368378388398408418428438448458468478488498508518528538548558568578588598608618628638648658668678688698708718728738748758768778788798808818828838848858868878888898908918928938948958968978988999009019029039049059069079089099109119129139149159169179189199209219229239249259269279289299309319329339349359369379389399409419429439449459469479489499509519529539549559569579589599609619629639649659669679689699709719729739749759769779789799809819829839849859869879889899909919929939949959969979989991000100110021003100410051006100710081009101010111012101310141015101610171018101910201021102210231024102510261027102810291030103110321033103410351036103710381039104010411042104310441045104610471048104910501051105210531054105510561057105810591060106110621063106410651066106710681069107010711072107310741075107610771078107910801081108210831084108510861087108810891090109110921093109410951096109710981099110011011102110311041105110611071108110911101111111211131114111511161117111811191120112111221123112411251126112711281129113011311132113311341135113611371138113911401141114211431144114511461147114811491150115111521153115411551156115711581159116011611162116311641165116611671168116911701171117211731174117511761177117811791180118111821183118411851186118711881189119011911192119311941195119611971198119920020120220320420520620720820921021121221321421521621721821922022122222
```

6 REM*****

7 REM* BY MARCO L. OSTINI *

8 REM*****

10 CLS:PRINT"

11 PRINT"ENTER YOUR SENTENCE"

12 PRINT"NO MORE THAN 21 CHARS"

13 PRINT:PRINT:INPUTX\$

14 IF LEN(X\$)>21 THEN GOTO 16

15 PRINT@391, "*****"

16 PRINT@391, "HARD COPY ? [Y/N]"

17 P\$=INKEY\$

18 IF P\$="N" OR P\$="Y" THEN GOTO 17

19 IF P\$="Y" THEN P\$="I": IF P\$="N" THEN P\$="O"

20 GOTO 6000

50 REM THE LETTERS- A TO Z ONLY

100 REM

110 FOR I=2700:SET(X,Y+1):SET(X+4,Y+1):NEXT

120 FOR I=1703:SET(X+1,Y+4):NEXT

130 SET(X+1,Y+1):SET(X+2,Y):SET(X+3,Y+1):RETURN

200 REM

210 FOR I=0706:SET(X,Y+1):NEXT

220 FOR I=1703:SET(X+1,Y):SET(X+1,Y+3):SET(X+1,Y+6):NEXT

230 SET(X+4,Y+1):SET(X+4,Y+2):SET(X+4,Y+4):SET(X+4,Y+5):RETURN

300 REM

310 FOR I=1705:SET(X,Y+1):NEXT

320 FOR I=1703:SET(X+1,Y):SET(X+1,Y+6):NEXT

330 SET(X+4,Y+1):SET(X+4,Y+5):RETURN

400 REM

410 FOR I=1705:SET(X,Y+1):SET(X+4,Y+1):NEXT

420 FOR I=0703:SET(X+1,Y):SET(X+1,Y+6):NEXT

430 RETURN

500 REM

510 FOR I=0706:SET(X,Y+1):NEXT

520 FOR I=1704:SET(X+1,Y):SET(X+1,Y+6):SET(X+1,Y+3):NEXT

530 RESET(X+4,Y+3):RETURN

600 REM

610 FOR I=0706:SET(X,Y+1):NEXT

620 FOR I=0703:SET(X+1,Y):SET(X+1,Y+3):NEXT

630 SET(X+4,Y):RETURN

700 REM

710 FOR I=1705:SET(X,Y+1):NEXT

720 FOR I=1704:SET(X+1,Y):SET(X+1,Y+6):NEXT

730 SET(X+4,Y+5):SET(X+4,Y+4):SET(X+3,Y+4):RETURN



What trees do fingers and thumbs
grow on?
PALM TREES.

820 FOR I=1703:SET(X+1,Y+3):NEXT:RETURN
900 REM
910 FOR I=1703:SET(X+1,Y):SET(X+1,Y+6):NEXT
920 FOR I=1705:SET(X+2,Y+1):NEXT:RETURN
1000 REM
1010 FOR I=0705:SET(X+4,Y+1):NEXT
1020 FOR I=1703:SET(X+1,Y+6):NEXT
1030 SET(X,Y+5):RETURN
1100 REM
1110 FOR I=0706:SET(X,Y+1):NEXT
1120 FOR I=1704:SET(X+1,Y+4-1):SET(X+1,Y+2+1):NEXT
1130 RETURN
1200 REM
1210 FOR I=0706:SET(X,Y+1):NEXT
1220 FOR I=1704:SET(X+1,Y+6):NEXT:RETURN
1300 REM
1310 FOR I=0706:SET(X,Y+1):SET(X+4,Y+1):NEXT
1320 SET(X+1,Y+1):SET(X+2,Y+2):SET(X+3,Y+1):RETURN
1400 REM
1410 FOR I=0706:SET(X,Y+1):SET(X+4,Y+1):NEXT
1420 FOR I=1703:SET(X+1,Y+1+1):NEXT
1430 RETURN
1500 REM
1510 FOR I=1705:SET(X,Y+1):SET(X+4,Y+1):NEXT
1520 FOR I=1703:SET(X+1,Y):SET(X+1,Y+6):NEXT
1530 RETURN
1600 REM
1610 FOR I=0706:SET(X,Y+1):NEXT
1620 FOR I=1703:SET(X+1,Y):SET(X+1,Y+3):NEXT
1630 SET(X+4,Y+1):SET(X+4,Y+2):RETURN
1700 REM
1710 FOR I=1704:SET(X,Y+1):SET(X+4,Y+1):NEXT
1720 FOR I=1702:SET(X+1,Y):SET(X+1,Y+6):NEXT
1730 FOR I=2704:SET(X+1,Y+2+1):NEXT
1740 SET(X,Y+5):SET(X+3,Y):RETURN
1800 REM
1810 FOR I=0706:SET(X,Y+1):NEXT
1820 FOR I=1703:SET(X+1,Y):SET(X+1,Y+3):SET(X+1,Y+2+1):NEXT
1830 SET(X+4,Y+6):SET(X+4,Y+1):SET(X+4,Y+2):RETURN
1900 REM
1910 FOR I=1703:SET(X+1,Y):SET(X+1,Y+3):SET(X+1,Y+6):NEXT
1920 SET(X,Y+1):SET(X,Y+2):SET(X,Y+5)
1930 SET(X+4,Y+1):SET(X+4,Y+4):SET(X+4,Y+5):RETURN

H.P. and VZ300.

Some DSE. store staff have been
telling folk that the E&F VZ200 Word
Processor will not work with a VZ300.
That is a little vague.!!! It WILL work
with an EXPANDED VZ300.



NOT J.D.

LE'VZ # 14 P4.

NOW GOTO P.5.


```

2000 REMT
2010 FORI=0T04:SET(X+1,Y):NEXT
2020 FORI=1T06:SET(X+2,Y+1):NEXT
2030 RETURN
2100 REMJ
2110 FORI=0T05:SET(X,Y+1):SET(X+4,Y+1):NEXT
2120 FORI=1T03:SET(X+1,Y+6):NEXT
2130 RETURN
2200 REMV
2210 FORI=0T04:SET(X,Y+1):SET(X+4,Y+1):NEXT
2220 SET(X+1,Y+5):SET(X+2,Y+6):SET(X+3,Y+5):RETURN
2230 RETURN
2300 REMW
2310 FORI=0T06:SET(X,Y+1):SET(X+4,Y+1):NEXT
2320 SET(X+1,Y+5):SET(X+2,Y+4):SET(X+2,Y+3):SET(X+3,Y+5):RETURN
2400 REMX
2410 SET(X,Y):SET(X,Y+6):SET(X+4,Y):SET(X+4,Y+6)
2420 FORI=0T04:SET(X+1,Y+1+1):SET(X+1,Y+5-1):NEXT
2430 RETURN
2500 REMY
2510 FORI=0T01:SET(X,Y+1):SET(X+4,Y+1):NEXT
2520 FORI=3T06:SET(X+2,Y+1):NEXT
2530 SET(X+1,Y+2):SET(X+3,Y+2):RETURN
2600 REMZ
2610 FORI=0T04:SET(X+1,Y):SET(X+1,Y+5-1):SET(X+1,Y+6):NEXT
2620 RETURN
4000 A=ASC(A$)-64
4005 IFA=-32THENRETURN
4010 IFA=1THEN100
4020 IFA=2THEN200
4030 IFA=3THEN300
4040 IFA=4THEN400
4050 IFA=5THEN500
4060 IFA=6THEN600
4070 IFA=7THEN700
4080 IFA=8THEN800
4090 IFA=9THEN900
4100 IFA=10THEN1000
4110 IFA=11THEN1100
4120 IFA=12THEN1200
4130 IFA=13THEN1300
4140 IFA=14THEN1400
4150 IFA=15THEN1500
4160 IFA=16THEN1600
4170 IFA=17THEN1700
4180 IFA=18THEN1800

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BASIC programming books.

We have four only new books for sale called:-

Learning TRS-80 BASIC
for Models I,II/16 and III.
By David A. Lien. \$10.00. *e*
Postage extra, probably around
\$3.00 within Australia.
This is the 528 page book that
I consider is the Bible of
BASIC for programmers.

++ NEXT ISSUE ++

I am sorry but I may not be letting you know what is planned for the next LE'VZ or any future LE'VZ as it is very difficult planning so far in advance. I find that a more interesting article or programme should be printed, and so a planned item/s have to be held over until another LE'VZ. Such as the articles on the Compunise and ROM printer listings. I must not have more than five or six sheets of paper in LE'VZ otherwise the 36c postage is not enough.

Now that I can use Compressed print, I will be able to print more. Please let me know what you think of this LE'VZ.

```

4190 IFA=19THEN1900
4200 IFA=20THEN2000
4210 IFA=21THEN2100
4220 IFA=22THEN2200
4230 IFA=23THEN2300
4240 IFA=24THEN2400
4250 IFA=25THEN2500
4260 IFA=26THEN2600
5000 X=INT(128-LEN(X$)*6)/2
5010 Y=(64-7)/2
5020 FORK=1T0LEN(X$)
5030 A$=MID$(X$,K,1):BOSUB4000
5040 X=X+6
5050 NEXT:GOTO6020
6000 MODE(1):COLOR4:BOSUB6010
6010 GOTO5000
6020 FORI=1T02000:NEXT
6030 IFP=1THENCOPY
6040 PRINT#326,"ANOTHER TRY ? [Y]"
6050 INPUT#3:IFT$="Y"THEN10ELSEEND

```

++ WZ AND BULLETINBOARDS. ++

Early one Saturday in September, Mr. Alex Young of Aspley was good enough to bring to our place his VZ300, ET1/DSE VZ-200 Terminal and a Sendata Modem V21 to demonstrate the operation of the VZ in relation to Bulletin Boards. I thank Alex again for the demonstration. Mr. Larry Taylor was also present.

The Sendata modem is a 300 Baud unit and was selling at the time for around \$190.00. To operate the system one has to learn a few switching actions but would not take long to remember. Once the system is set up, switch all on.

The VZ will display the System Menu.

Using the 'phone, dial the number required, listen and switch the modem as required. When the VZ system has accessed the bulletin board's system, one enters information asked for which is pass code, log on name and so on.

As most bulletin boards run at 40 characters per line (across the VDU) the text is cut and wrapped around on the VZ VDU somewhat, but in general is quite readable.

A printer can be switched on/off but we found that a printer would NOT operate correctly. It also caused garbage to be viewed on the VDU. We are endeavoring to see what can be done to correct the situation. If anyone can help please let me know.

It is not possible to access VIATEL as it uses 1200/75 Baud rates.

The Disc System also would not operate. The ideal thing to be done is programme an EPROM so it would replace the one in the VZ interface unit.

This is a very brief outline of the units but I hope it throws some light on the subject. One would have to be prepared to spend a lot of time and 'phone bill money to get much benefit out of the system. There does not appear to be any VZ information on any bulletin board at present. If anyone knows where there is please let us know.

* * SOFTWARE FOR SALE * *

NOVEMBER 1986.

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All prices are correct at time of printing, but may change without notice. All articles available while stocks last. All prices in A\$.

All tape software includes postage up to four tapes.

When ordering software, always state := which computer VZ200 or VZ300, if you have an expansion RAM unit, and if you have a disc drive system connected or denote as below.

VZ1 = unexpanded VZ200. VZ2 = unexpanded VZ300.
VZ3 = expanded VZ200. VZ4 = expanded VZ300.

IE. TB15 = Tape only unit of B15. DB5 = Disc only unit of B5.

T/DE4 = Tape or Disc unit of E4. The price stated is for a Tape unit. If a disc unit is required, add \$5.00. to the Tape price. The price of a Disc unit is stated.

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*** NEW SOFTWARE. ***

DB16 CHEQUE LEDGER DISC \$ 60.00. VZ3-VZ4.

A small business unit based on T/B1 (CASHBOOK LEDGER) but for Disc operation only, in that all data is saved/loaded to/from Disc.

Type in :- date, paid to, cheque \$, bank \$ and 12 other \$ columns. View data, correct (edit) data, printout of all data across two A4 sheets of paper by printing the left side then the right side. This allows an 80 column printer such as a BF100 or similar rather than an expensive wide business type.

Each "type in session" is saved to Disc, which is loaded in at the next session so that new data is typed in and merged. This is then saved to Disc. In this way the month's or period's file is built up ready to be printed at the close of the month/period.

At the close of that month/period, you type in the previous month's/period's running totals. All \$ totals are then calculated and printed at the bottom.

DU20. DISC GUARD. \$ 60.00. VZ1-VZ4.

DISK GUARD prevents easy copying of programmes stored on Disc. IE. <DCOPY> and FILECOPIER cannot copy a DISK GUARDED Disc. Basic programmes are automatically BREAKPROOFED to produce an autorun programme, which will re-run if the <BREAK> key is pressed. That programme CANNOT be effectively listed/listed.

T/DU21 VZ-EPSON P/PATCH. \$15.00. VZ1-VZ4.

Larry Taylor's new M/L unit. It allows Epson or Epson compatible printers to PRINT or LIST all of the VZ's inverse and graphic characters. These same characters can also be dumped to the printer from the LO-RES screen in the COPY mode. In MODE(1), use of the COPY command will also dump the HI-RES screen to the printer.

COPY,n, allows a range of 4 to 8 to be selected to allow for varying line feeds for different printers. The utility adjusts for any size VZ memory. It also prints the Extended Basic commands that are used if a programme is written using the Extended Basic utility. Very handy! It can even be used with the Extended Basic utility loaded.

SPECIAL NOTE ON COPYPROTECT.

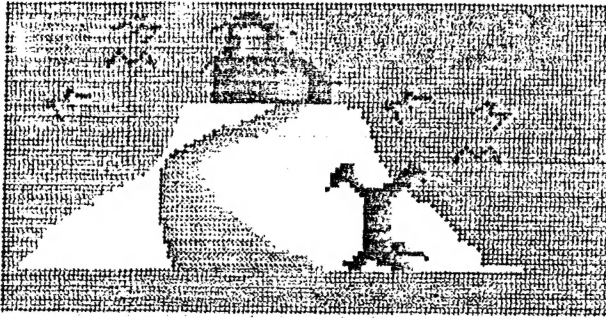
D/T19 COPYPROTECT will copy most but not all BASIC and M/L programmes. The IE. CHESS unit presents a problem because it starts in the communications region and not at the usual Bottom of Basic point.

+ + EXISTING SOFTWARE. + +

D/TU2	EDITOR/ASSEMBLER	\$ 20.00.	VZ3-VZ4.
D/TB1	CASH BOOK LEDGER	\$ 20.00.	VZ3-VZ4.
TU4	COLOUR GRAPHICS	\$ 10.00.	VZ3-VZ4.
D/TE1	KEYBOARD	\$ 8.00.	VZ1-VZ4.
D/TE2	WORDMATCHING	\$ 10.00.	VZ3-VZ4.
D/TE3	MEATPIES	\$ 10.00.	VZ3-VZ4.
D/TU3	UTILITIES	\$ 15.00.	VZ2-VZ4.
TU5	WEAVING DRAFTS	\$ 10.00.	VZ1-VZ4.
D/TE4	MATHS COUNTDOWN	\$ 10.00.	VZ3-VZ4.
D/TE5	COORDINATES	\$ 10.00.	VZ2-VZ4.
D/TE6	TOWER of HANOI	\$ 8.00.	VZ1-VZ4.
D/TE7	MICROSCOPE	\$ 8.00.	VZ3-VZ4.
D/TE8	BLOCK PUZZLER	\$ 10.00.	VZ1-VZ4.
TE20	PLUS and MINUS	\$ 10.00.	VZ1-VZ4.
TE24	MATHS	\$ 15.00.	VZ3-VZ4.
TE25	QUEENSLAND	\$ 10.00.	VZ1-VZ4.
TE27	EUROPEAN CAPITALS	\$ 10.00.	VZ1-VZ4.
TE30	CAMPING	\$ 10.00.	VZ1-VZ4.
D/TB2	MANSION and NOVA	\$ 12.50.	VZ1-VZ4.
MANSION... VZ3-VZ4. for NOVA			
D/TB3	VZ MONOPOLY.	\$ 12.50.	VZ3-VZ4.
TU12	SEARCHTAPE	Deleted.	
D/TB13	SCOTLAND YARD	\$ 12.50.	VZ3-VZ4.
DB4	LE'VZ D'BASE	\$ 98.00.	VZ3-VZ4.
TB15	DATABASE-VZ	\$ 25.00.	VZ3-VZ4.
TB35	HAUNTED MANSION	\$ 12.50.	VZ3-VZ4.
TU6	VZ EXTENDED BASIC	\$ 20.00.	VZ1-VZ4.
TU7	PROTECT	Deleted.	
TU8	CHARGE/DELETE/REN	\$ 12.50.	VZ3-VZ4.
TU9	MONITOR DEBUGGER	\$ 25.00.	VZ1-VZ4.
This new version finds VZ memory size itself.			
TU10	EXTENDED BASIC	\$ 12.50.	VZ3-VZ4.
TU11	ARRAY/RESTORE	\$ 14.95.	VZ3-VZ4.
You must have TU10 to use TU11.			
D/TU12	FILESEARCH	\$ 10.00.	VZ1-VZ4.
DE1-8	EDUDISK	\$ 50.00.	VZ3-VZ4.
T/DE9	MEATPIES V2.	\$ 15.00.	VZ3-VZ4.
TU18	LOAD XX80 FILES.	\$ 20.00.	VZ1-VZ4.
This new version finds VZ memory size itself.			
T/DG36	BLACKJACK.	\$ 20.00.	VZ3-VZ4.
T/DG37	POKER MACHINE.	\$ 20.00.	VZ3-VZ4.
T/DG38	WORDSQUARES.	\$ 10.00.	VZ2-VZ4.
T/DG39	COMPUTER MONOPOLY.	\$ 15.00.	VZ3-VZ4.
T/DG40	TRIVIAL CULT.	\$ 15.00.	VZ2-VZ4.
T/DG41	SCOTLAND YARD 2.	\$ 15.00.	VZ3-VZ4.
DB5	LE'VZSTATEMENT.	\$185.00.	VZ4.
DB16	CHEQUE LEDGER D.	\$ 60.00.	VZ3-VZ4.
D/TU19	COPY/PROTECT.	\$ 30.00.	VZ1-VZ4.
DU20	DISC GUARD.	\$ 60.00.	VZ1-VZ4.
T/DU21	VZ-EPSON PRINT/P.	\$ 15.00.	VZ1-VZ4.
DU22	DISK COPY.	\$ 10.00.	VZ1-VZ4.

OUR BOOK - VPROGRAMMEZ - VHINTZ
VHABWMAEZ IS FOR SALE
A \$18.50 POSTAGE INCL
WITHIN AUSTRALIA.

KEIVZ #14 P6.



Larry Taylor's PRINTER PATCH unit T/DU21

Larry Taylor's PRINTER PATCH unit
T/DU21.

Refer to the software listing. The two pictures are a <COPY> of Scott Le Bruns game, Haunted Mansion. As you can see there is a difference between them. This is caused by the <COPYn> command on line 340. The Low Resolution <COPY> of lines 100 to 130 give one line spacing. In line 220 the <COPYn> command eliminates this line spacing to give the picture of one screen display of Larry's WORDMATCHING unit. By typing in the little programme after you have loaded PRINTERPATCH, you can test it with your Epson Compatible printer. Of course a Disc Drive System is required in this case to <BLOAD> the High Res. pictures.

PRINTER PATCH will not work with a GP100 printer. The High Res. screen can be printed by the <COPY> command, but the Low Res. picture will have the single line spaces present.

```

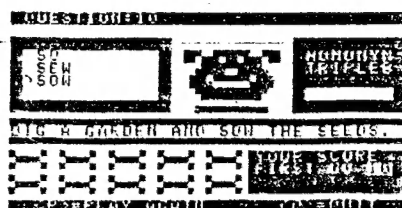
10 POKE30744,0:CLS:COLOR2
20 PRINT " "
30 PRINT " "
40 PRINT " "
50 PRINT " "
60 FOR T=320255:PRINTCHR$(T):LPRINTCHR$(T):NEXT T:PRINT:LPRINT
70 SOUND20,1;31,1:PRINT
80 COLOR3
90 FOR T=105000:NEXT
100 PRINT " "
110 PRINT " THE SCREEN CAN NOW BE DUMPED "
120 PRINT " TO THE PRINTER USING COPY "
130 PRINT " "
140 COPY
150 SOUND20,1;31,1:PRINT:PRINT:LPRINT
160 PRINT "TO DEMONSTRATE THE NEW COPY "
170 PRINT "COMMAND A SCREEN WILL BE LOADED "
180 PRINT "FROM DISK AND THEN DUMPED TO THE "
190 PRINT "PRINTER."
200 FOR T=105000:NEXT
210 POKE30744,1
220 BLOAD"WD06SCRN":COPY1:LPRINT
230 POKE30744,0
240 SOUND20,1;31,1
250 FOR T=102000:NEXT
260 CLS
270 PRINT "TO TEST THE USE OF THE COPY AND "
280 PRINT "COPY1 COMMANDS IN HI-RES MODE "
290 PRINT "A SCREEN WILL BE LOADED AND THEN "
300 PRINT "DUMPED TO THE PRINTER TWICE. "
310 FOR T=105000:NEXT
320 SOUND20,1;31,1
330 MODE(1):BLOAD"HAUNTMS"
340 COPY1:LPRINT:COPY1
350 FOR T=105000:NEXT
360 SOUND20,1;31,1
370 LPRINT
380 PRINT "FINALLY A DEMONSTRATION IS GIVEN"
390 PRINT "OF THE COPY1 COMMAND."
400 LLIST

```

```

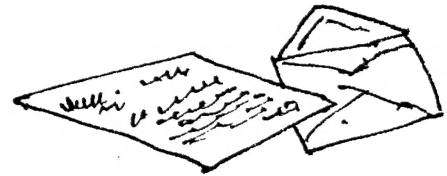
THE SCREEN CAN NOW BE DUMPED
TO THE PRINTER USING COPY

```



What do you call a drunken ghost?
A methylated spirit.

LETTERS TO THE EDITOR.



Dear Editor,

This letter is in response to the "Stirring" you did in Le' VZ #12 about the potential of the VZ.

It has spurred me on to the stage where my VZ-300 is now permanently set up and with extra memory, printer interface, printer and joysticks. I am continuing to upgrade my system.

Marco Ostini, 8 Symes Street, Stanthorpe Q. 4380. VZ USER.

DISC FILE PROGRAMMING.

Many folk have been asking how to change the "FILENAME" disc data SAVE, LOAD or ERASE. The only way it appears to be achieved is by POKEing the name into the part of the statement for the disc system. In the case of reading or writing to disc, there must be the OPEN statement.
1000 OPEN"CLUB1",1 for writing to disc.

The address of the first character of the filename, in the case of C for CLUB, has to be calculated.

The short programme below the first character of the name "FIRST1ZZ" on line 7 is 31591. That is the letter F FIRST. And so it goes for the other six statements on lines 8 to 20. The filename maximum length is eight so line 21 in spaces to make a total of eight characters for the name. Line 4 allows for no more than eight characters to be entered.

This is the bare bones of the routine that you can build. Everything from line 1 to line 20 can be changed otherwise addresses will change of the filename statements. It is up to you to arrange for data input and data read/print.

This is TA\$ in this programme. As mentioned in an earlier issue the maximum number of bytes in TA\$ is around 190. If needed more than that then a FOR-NEXT loop must be used, and TA\$ would have to be changed to TA\$(X).

There are obviously other ways of doing the same job, but I hope this clarifies the matter with those who are interested. Our LE'VZ D'BASE is quite different in this respect.

```
1 GOT025'123
2 F1$=LEFT$(F1$,8)
3 IF LEN(F1$)<8 THEN F1$=" ":GOTO3
4 FOR I=0 TO 7
5   POKE NA+I,ASC(MID$(F1$,I+1,1))
6 NEXT I:RETURN
7 NA=31591:GOSUB2:OPEN"FIRST1ZZ",1
8 NA=31623:GOSUB2:PRINT"FIRST1ZZ",TA$
9 NA=31659:GOSUB2:CLOSE"FIRST1ZZ":GOTO25
12 NA=31694:GOSUB2:OPEN"FIRST1ZZ",0
13 NA=31726:GOSUB2:INPUT"FIRST1ZZ",TA$
14 NA=31762:GOSUB2:CLOSE"FIRST1ZZ":GOTO25
20 NA=31796:GOSUB2:ERASE"FIRST1ZZ":GOTO25
25 PRINT"***** MENU *****"
30 PRINT"S  SAVE TO DISC"
35 PRINT"L  LOAD FROM DISC"
40 PRINT"D  DELETE FILE"
45 K$=INKEY$
50 K$=INKEY$:IF K$="" THEN GOTO50
55 IF K$="S" THEN GOSUB70:GOTO7
60 IF K$="L" THEN GOSUB75:GOTO12
65 IF K$="D" THEN GOSUB80:GOTO20
70 INPUT"NAME OF FILE";F1$:RETURN
75 INPUT"NAME OF FILE TO READ";F1$:RETURN
80 INPUT"NAME OF FILE TO DELETE";F1$:RETURN
100 REM FROM TONY HAGON OF INVERCARGILL. NZ.
110 REM DO NOT ALTER FROM LINE 1 TO 20!!! DATA IS TA$.
```

SOFTWARE EXTRA.

As mentioned in my editorial, we release for sale these two titles that have been requested by many folk.

T/D642 AIR TRAFFIC CONTROLLER \$20.00. VZ3-VZ4.
T/D643 LEARJET \$20.00. VZ3-VZ4.

Scott Le Brun's games.

People who have purchased Scott's VZ-MONOPOLY or COMPUTER MONOPOLY can obtain an updated version, free of charge, V2.0 by sending the tape/disc to Scott. You must include enough money to cover postage and packing.

Send to :-

VZ-DOWN UNDER, MR. S. Le Brun,
5 Cameron Court, WANTIRNA. VIC. 3152.

BOB KITCH'S HARDWARE.

Bob has some hardware under wraps being developed in a similar vein to David Newcombe. His first piece will be an 8 slot mother/buffer board. Keep an ear open for more news. Watch Australian Electronics Monthly also. Bob is having articles printed in AEM, the first being about video display modifications to the VZ in the October issue.

Table 1. SUMMARY OF DISPLAY MODES FOR MC6847 VDG.

	colours available	bytes video RAM	memory mapping	element size
<u>Four ALPHANUMERIC Display Modes.</u>				
i) Internal ROM Alphanumerics	2	512	byte	8X12
ii) Internal ROM Alphanumerics - Inverted	2	512	byte	8X12
iii) External ROM Alphanumerics	2	512	byte	8X12
iv) External ROM Alphanumerics - Inverted	2	512	byte	8X12
<u>Two SEMI-GRAPHIC Display Modes.</u>				
v) 32 by 16 Semi-graphics 4 (SG4)	8	512	byte	8X12
vi) 32 by 16 Semi-graphics 6 (SG6)	4	512	byte	8X12
<u>Eight GRAPHIC Display Modes.</u>				
vii) 64 by 64 Colour Graphics One (CG1)	4	1024	2 bit	3X4
viii) 128 by 64 Resolution Graphics One (RG1)	2	1024	1 bit	2X3
ix) 128 by 64 Colour Graphics Two (CG2)	4	2048	2 bit	2X3
x) 128 by 96 Resolution Graphics Two (RG2)	2	1536	1 bit	2X2
xi) 128 by 96 Colour Graphics Three (CG3)	4	3072	2 bit	2X2
xii) 128 by 192 Resolution Graphics Three (RG3)	2	3072	1 bit	2X1
xiii) 128 by 192 Colour Graphics Six (CG6)	4	6144	2 bit	2X1
xiv) 256 by 192 Resolution Graphics Six (RG6)	2	6144	1 bit	1X1

i), v) and ix) are implemented as standard on the VZ's and x) may be easily implemented by a small hardware alteration detailed by Dimond in Aug. 84 'Electronics Australia' pg. 65.

From this brief description a grasp of how the VDG operates may be gleaned. However, a few other features exist on the chip and are readily accessible to the programmer.

A number of control lines may be soft switched to implement the various modes resident in the VDG. In the VZ a number of these lines are hard wired thereby rendering these options unavailable. (refer to hardware change referenced above).

Normal or Reverse Alphanumeric displays are set by the (INV) line. Selection of the internal (on chip) or external character sets held in ROM is set by the (INT/EXT) line. Switching of the screen to Alphanumerics or Graphics mode is determined by the (A/G) line.

Switching of the screen between Alphanumerics or Semigraphics mode is set by the (A/S) line.

Three lines (GMO, GM1, GM2) are used to select one-of-eight Graphics modes to be used.

An eighth control line (CSS) selects the colour set to be used in the particular mode selected. Most modes have two colour sets available. In Alphanumeric and Semigraphics 4 modes one-of-two background colours is selected and in Semigraphics 6 and Full Graphics modes one-of-two colour sets is selected.

For completeness it is mentioned here that the VDG has access to the byte wide data buss (D7-D0) and the 13 least significant bits of the address buss (A12-A0) to enable up to 6K of video RAM to be handled.

The operating mode of A/S, INT/EXT, CSS and INV may be changed on a character by character basis.

I will discuss MODE(0) or 10-res graphics in the next LE'VZ.

PUBLIC D. DFD1

```
T:MENU      01 00 7AE9 7DF2
T:BARGRAPH  01 07 7AE9 7C9B
B:PO        01 08 7000 7B01
T:MINE      02 0C 7AE9 91A4
T:NAME      05 0E 7AE9 7DBF
T:GO        06 01 7AE9 8D49
T:OTHELLO   08 07 7AE9 7B0E
T:WORDS     08 08 7AE9 8943
T:GRAPH     0A 06 7AE9 8BBA
T:SKETCH    0C 06 7AE9 80B2
T:METEOR    0D 04 7AE9 7FC0
T:ANIMAL    0D 0E 7AE9 8278
T:PENCIL    0E 0E 7AE9 8CC0
T:INVENTORY 11 03 7AE9 891B
```

258 RECORDS 32,250K BYTES FREE

* LE'VZ labels *

As many OOPs are aware, the VZ prints the name and address labels of OOPs who have at least \$1.00 credit. If the credit is \$1.00, then a little reminder is also printed and included inside the envelope so that you may send more money if you wish to receive more LE'VZs.

Now I have programmed the VZ to print at the top of the label the \$ credit AFTER that LE'VZ. This will help OOPs keep tabs on their credit.

```
5 REM CIRCLE GENERATOR
10 CLS:PRINT"CIRCLE GENERATOR"
20 INPUT"BACKGROUND COLOUR";BC
30 INPUT"DRAWING COLOUR";DC
45 COLOURDC,BC
50 INPUT"CIRCLE LOCATION";L,LA
60 INPUT"CIRCLE SIZE";S,SA
70 MODE(1)
80 FORP=1TO10STEP0.015
90 Q=SIN(P)+L;W=COS(P)+LA
100 SET(Q*S,W*SA):NEXT
110 GOTO110
120 REM IMPORTANT NOTE!!!
130 REM (L*S#2)OR(LA*SA#2)
140 REM CANNOT BE GREATER
150 REM THAN64AND128
160 REM RESPECTIVELY
170 REM PROGRAMME BY BRENDEN MURPHY
```

LE'VZ #14 P9.

HARDWARE and FIRMWARE for SALE.

VSOFTWAREZ, 39 Agnes St., TOONONG. QLD. 4066.

Unlike our software prices, these prices do NOT include postage. Include extra money and we will send you back any surplus money in the parcel. Prices may change without prior notice.

64K DSE. RAM pack.	New	\$110.00.
GP100 printer ribbons.	New.	Not the exact one but a few minutes fiddle.
		\$ 22.00 for two.
C10 tapes	New	\$ 1.30. each in lots of five.
C20 tapes.	New	\$ 1.40. each in lots of five.
Fuji 5 1/4 SSD floppy discs	New	\$ 22.00. per pack of ten.
One GP100 printer	Used.	\$220.00.
Rubber membrane (keys)	New	\$ 18.00. These are for the VZ200.
2000 MFD 100 VP electro caps		\$ 2.00. These are used and would suit a big power supply for a VZ.

CUSTOMIZING YOUR DSE E&F WORD PROCESSOR for ANY VZ COMPUTER.

by Bob Kitch 7 Eureka St., Kenmore QLD., 4069.

The tape-based Epps and Fackerell Word Processor was designed for an expanded VZ-200 with top-of-memory (TOM) at CFFFH. The program loads from 7B80H to 957FH. The top of the actual program is at 953DH. The area from 7AE9H and 7B7FH is reserved as program stack space. A section of memory above 953DH is used to store the text. Hey Presto! - from 953DH to TOM is 3AC2H or 15042. The latter number is readily identifiable as the number of free bytes available when the program first fires.

A number of Users have expanded VZ-300 or VZ computers to 64K memory packs such that TOM is above CFFFH. This means that the 15K character limitation should be capable of being exceeded by getting into the original code. Unfortunately Messrs. E&F did not program the WP to be smart enough to look at the TOM pointers located in the expanded RAM area at 78B1/2H as this would then have made allocation of free space automatic for any memory size (including 957FH). Note that an unexpanded VZ-200 (8K) has sufficient memory to load the WP program.

The following expose details the alterations to the code needed to make the WP "smart". It requires the use of a MONITOR/EDITOR program. I would recommend Mr. W. O'Brien's MONITOR-DEBUGGER V2.0 (an indispensable utility for the serious User and available from Mr. W. O'Brien, 50 Avon Av., West Ryde, N.S.W. 2114 for \$20 on tape and with instruction sheet) - but any other monitor would do.

The method of altering the program involves "patching" code over existing code located in the initialization routine so that the program flow is directed into a new section of code placed in previously unused space. The new code looks at the TOM pointers and then sets about altering the number of constants embedded in the code itself. This is a sample of self-modifying code done during program initialization time. After the necessary alterations, flow is redirected to the initialization routine. The patch code is frequently over-written by text, but it has done its job. Sounds horrendous doesn't it? Practically the procedure is simple. The Assembler code is given below for interested reader to follow.

Patching with a MONITOR is a very powerful technique for modifying programs to do what you want them to do. The modified program is finally loaded to tape/disk for saving, verification and use, although in this instance I have done this for you.

Follow closely :-

- Load the WP program using your MONITOR.
- Use the Display and modify command to insert the hex. into the indicated memory locations as follows.

ADDRESS HEX ASSEMBLER

9475 CD 3E 95 CALL 953E ; Go to self-modifying routine.

```

953E 2A B1 78 LD HL,(78B1) ; Put TOM into HL.
9541 22 7D 86 LD (867D),HL ; Set to TOM.
9544 22 FA 87 LD (87FA),HL ;
9547 23 INC HL ; HL=TOM+1.
9548 7C LD A,H ; A=MSB of TOM+1.
9549 22 55 7D LD (7D55),HL ; Alter memory pairs.
954C 22 C1 85 LD (85C1),HL ;
954F 22 0A 88 LD (880A),HL ;
9552 22 97 8B LD (8B97),HL ;
9555 22 8B 94 LD (948B),HL ;
9558 32 FF 7C LD (7CFF),A ; Alter single byte to
MSB.
955B 32 27 7D LD (7D27),A ;
955E 32 85 82 LD (8285),A ;
9561 32 32 87 LD (8732),A ;
9564 32 DD 87 LD (87DD),A ;
9567 32 7D 89 LD (897D),A ;
956A 32 5E 8A LD (8A5E),A ;
956D 32 15 8C LD (8C15),A ;
9570 32 62 8C LD (8C62),A ;
9573 32 87 8C LD (8C87),A ;
9576 32 A9 8C LD (8CA9),A ;
9579 C9 RET ; Go to 9478.

```

3. Check the hex listing and then save the "SMART.WP" on tape or disk and test.

If you have an expanded VZ-200 or 300 with a 64K expansion (TOM at FFFFH and 34K) then the number of free characters is 27330. The TOM can actually be set to any value before loading the WP which will then adjust itself to the set amount of available memory.

An unexpanded VZ-300 (16K) will have 8898 characters free; an expanded VZ-200 (24K) has 15042 and an expanded VZ-300 (32K) has 25282.

I hope that you manage to get the WP working in the manner described. It certainly makes it more useful. If anyone has any problems please let me know.

* CHRISTMAS GATHERING *

PHILIP CHAIST M.A. SV

I will arrange another gathering this year similar to last years one, 13th. of DECEMBER 1986 at the MILTON PRIMARY SCHOOL, BAYSWATER RD, MILTON. Start about 9AM to about 4PM. We will be demonstrating all sorts of software and hardware. I will have various items for SALE at 10% off. A lucky door prize also. Bring your own drinks and eats, although there are shops about 200 metres away. Bring your favourite piece of software or hardware. PLEASE contact me as soon as you receive this LE'VZ, IF YOU INTEND TO BE PRESENT. J.D.

* * * DISC MENUE * * *

BY DAVE BOYCE

```

40 * DISK MENU
50 * BY DAVE BOYCE
60 * NOV'85
70 * ADJUST 'C' IN 120 TO THE    NUMBER OF FILES ON THE DISK
80 * WITH 13 AS THE MAXIMUM (FOR 'C')
90 * DO NOT INCLUDE THE 'MENU'   IN THE COUNT FOR 'C'
100 * UPDATE THE MENU AFTER      EVERY NEW FILE HAS BEEN ADDED
110 * BY TYPING IN THE IMMEDIATE MODE- GOTO 400 <PRESS RETURN>
120 D=109:C=3:E=C
130 CLS
140 PRINT@44,"MENU"
150 DIR:PRINT@64,"          "
160 FOR L=1 TO C:PRINT@D,L:D=D+32:NEXT L
170 *
180 INPUT" YOUR CHOICE";C
190 *
200 IF C<1 OR C >E THEN 180
210 IF C=1 THEN PRINT"LOADING- WORD PROCESSOR":BRUN"WORDPROC"
220 IF C=2 THEN PRINT"LOADING- EDITOR ASSEMBLER":BRUN"EDIT/ASM"
230 IF C=3 THEN PRINT"LOADING- WORD SEARCH":RUN "WORDS/CH"
240 IF C=4 THEN PRINT"LOADING- 4          X": " " "
250 IF C=5 THEN PRINT"LOADING- 5          X": " " "
260 IF C=6 THEN PRINT"LOADING- 6          X": " " "
270 IF C=7 THEN PRINT"LOADING- 7          X": " " "
280 IF C=8 THEN PRINT"LOADING- 8          X": " " "
290 IF C=9 THEN PRINT"LOADING- 9          X": " " "
300 IF C=10 THEN PRINT"LOADING- 10         X": " " "
310 IF C=11 THEN PRINT"LOADING- 11         X": " " "
320 IF C=12 THEN PRINT"LOADING- 12         X": " " "
330 IF C=13 THEN PRINT"LOADING- 13         X": " " "
399 END
400 PRINT:PRINT"TYPE IN 'CONT' AND PRESS          <RETURN> TO";
402 PRINT" UPDATE THE MENU"
405 STOP
408 PRINT" PLEASE WAIT - UPDATING THE MENU"
410 ERA"MENU"
415 SAVE"MENU"
420 DIR:END

```

- <1> MAKE THE 'MENU' THE FIRST FILE ON YOUR DISK.
 <2> FOLLOW INSTRUCTIONS IN THE REM LINES.
 <3> FILENAMES SHOWN AS Examples. - Dave.
 <4> Simply Type in- RUN "MENU" (RET).

CONTACT DAVE ON -(08) 3846574

PS.
 The second public domain disc directory
 is on page 9.

"Are you married?"
 "Yes."
 "Children.?"
 "Three boys and two girls".
 "That's five altogether."
 "No-- one at a time."

PUBLIC DOMAIN SOFTWARE.

I am now able to offer some
 Public Domain Software on disc.
 Below are two disc directory
 printouts.

At present I haven't got the
 time to save them to tape as it is
 a rather time consuming process.
 The cost is A\$15.00. We supply the
 disc and postage anywhere in
 Australia.

PUBLIC D. DPD2.

```

T:CIRCLE 01 00 7AE9 7B4F
T:TRIANGLE 01 01 7AE9 7B63
T:SPIRAL 01 02 7AE9 7B4E
T:LOOPS 01 04 7AE9 7B49
T:STAR 01 05 7AE9 7B4F
T:KNOTS 01 06 7AE9 7B59
T:FLOWER 01 07 7AE9 7B49
T:GUILLDTN 01 03 7AE9 7DFB
T:RACES 01 0D 7AE9 80F6
T:ROADER 02 0A 7AE9 8079
T:U.F.O. 03 06 7AE9 7E80
T:SUS 05 00 7AE9 80B4
T:LANDER 05 0D 7AE9 83F5
T:HELICPTR 03 0D 7AE9 83B2
T:SYMMETRY 04 0F 7AE9 7C11
T:BOUNCE 07 02 7AE9 7CAD
T:PIZZA 07 05 7AE9 83EE
T:SUBMRINE 08 08 7AE9 86B6
T:MORSE 1 09 0D 7AE9 83F0
T:CALENDAR 08 05 7AE9 8466
T:BIRTHDAY 0C 09 7AE9 82E9

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422 RECORDS 52.750K BYTES FREE

KE' UZ # 1A P11.

special Demonstration-Advertisement-Disc
e. It will hopefully help DSE sell more VZs and Disc
units. It will hopefully help us (VSOFTWARE2) to sell
our excellent software. Finally and most importantly
help existing and future VZ owners to obtain more
benefits from their VZ.

text is brief and to the point. The High Res
will attract peoples attention. It will run
asily. There are four time delay selects. The
time selected will enable the demo to run for about
es and the longest about 4 hours.

ave sent the DAD to a DSE store in each capital
have asked them to copy it and distribute copies to
her stores. Also if any of their customers ask for a
is up to the store's management to decide how to
it, but I suggest you supply a blank (INITed) disc
nicely, they may (DCOPY) it for you. Otherwise send
00 for a copy, which will include the disc and

RESS THAT DOPs ASK YOUR DSE. STORE STAFF TO HAVE THE
ING AND ON A COLOUR MONITOR IN PARTICULAR!!!
THANKS— J.D.



When the angels went
away from them back
into heaven, the
shepherds said to one
another, "Let's go to
Bethlehem and see
this thing that has
happened which the
Lord has told us."
So they hurried
off and found Mary
and Joseph, and saw
the baby lying in
the manger.

LUKE 2:15-16.

HAS THE VZ COME OF AGE???

Yes it has. The WAVZ Club of Perth has a job for the VZ
the 9th. and 10th. of January 1987. There will be an
Australian Speedway Championship meeting at the Claremont
odway involving the VZ against AMY computer for the first
we to calculate the progressive points system.

To read more about it, see the "National Speedway
Illustrated" October 1986 magazine by the "Newlyn Publishing
up of NSW". The magazine is distributed through-out
Australia, New Zealand and the United States. So mark one up
the GREAT VZ.

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JOHN D'ALTON DEC 1986.

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MISSION OF THE CONTRIBUTOR ON THE UNDERSTANDING
THE MATERIAL IS FOR PRIVATE USE OF READERS ONLY.
RIGHT IS RETAINED BY THE AUTHOR.

Graeme Bywater, here in the west along with other
are interested in starting up a National or
national VZ users group. The idea is to exchange ideas,
ments and such-like to help all concerned. Also any
ising to everybodys mutual benefit could be catered
One can go direct from club (group) to club or through
200/300 DOPs magazine. The cost (subject from time to
as John D'Alton declares) is a \$1.00 (AUD). The cost of
1.00 coin is to supplant the cost of the extra space
ed in the magazine and in turn to keep the cost of a
good magazine down for some time to come.

Interested groups can write to me at 53 Kensington Ave.,
Y. WA. 6062 or P.O. Box 388. The alternative is to
to the LE'VZ DOP magazine. Please put pen, pencil or
er to paper.

CELESTRON SOFTWARE.

Mr. D Dower of Ringwood VIC. received a tape programme
in early October from Celestron. He ordered it in June 1986
so communicated with the Minister for Consumer Affairs
because of the delay.

*** BOB KITCH'S INFO ***

Bob has now much more information and so has printed an
eight page booklet. It includes :-

- Vz Books.
- Books on BASIC.
- Books on ASSEMBLER and Z80.
- Commercial software reviews.

He also has compiled a list of past and present software
advertisers.

Write direct to:-

Mr. B Kitch, 7 Eureka St., KENMORE. QLD 4069.

Or 'phone (07)378 3745. Always include a S.A.S.Envelope
for any replies.

BUG IN SPRITE GENERATOR.

Scott Le Brun of Belgrave Heights has found this error
in the instruction manual. On page 13 - (POKEs for Image
Number)

POKE 32320,xxx should be - POKE 32230,xxx

"How are you getting on with your
football, Peter?"

"Well, Dad, pretty good. The
sports master said I was one of the
team's greatest drawbacks."

LE'VZ #14 P 12. END.